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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,308	03/12/2004	Jeanne Guillou	01807.101444.	5786
5514 7590 05/18/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER RADKIEWICZ, JARED	
			ART UNIT 2609	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/798,308

Applicant(s)

GUILLOU ET AL.

Examiner

Jared W. Radkiewicz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/12/2004 and 5/30/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. **Claims 2 and 13** are objected to because of the following informalities: The term "so-called" is ambiguous and unnecessary. The examiner recommends the omission of the words "so-called". Appropriate correction is required.

2. **Claims 2 and 13** are objected to because of the following informalities: The words low, normal and high should not be quoted. What source is being quoted? Why are the quotations necessary? The examiner recommends omission of the quotation marks in both claims. Appropriate correction is required.

3. **Claims 7 and 18** are objected to because of the following informalities: The dependence of these claims is improperly written. The claim must specifically cite which claim it is dependant from. For the purposes of this examination it will be assumed that claim 7 is dependant from claim 6 and claim 18 is dependant from claim 17. Appropriate correction is required.

4. Applicant is advised that should claim 12 be found allowable, **claim 23** will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing

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one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 12, and 23** are rejected under 35 U.S.C. 102(b) as being anticipated by Hidetaka (EP 1,069,764 A2).

Regarding **claim 1**, Hidetaka teaches a method of defining qualities for a digital image signal encoded beforehand ("image quality confirmation apparatus and method for allowing the user to confirm the image quality of a recompressed image", Paragraph 1), characterized in that it consists of defining a predetermined number of quality modes each corresponding to at least one decoding parameter of the digital signal ("a predetermined compression parameter", Paragraph 49; wherein the number of quality modes is 1 and the decoding parameter is the compression parameter) this definition being made on the basis of rate information provided via a graphical interface ("image quality graphs 140, 141, and 142 which visually express numerical representation of the image qualities", Paragraph 50) and perception quality information provided via the visualization of the decoded digital signal ("subwindows 121 and 122 each of which plays back and displays an image compressed by the transcoder", Paragraph 49),

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wherein all the quality modes defined and only the quality modes defined are made accessible to a final user ("In step S104, the image to be transcoded is recompressed by the transcoder 103 at the compression ratio selected in step S103, and recorded on the data storage 104.", Paragraph 64; wherein the data storage is accessible to the user).

Regarding **claims 12 and 23**, Hidetaka discloses an "apparatus" in addition to the "method", (Hidetaka Paragraph 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 2, 5, 13, and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidetaka (EP 1,069,764 A2) in combination with Muller ("Improving and Managing Multimedia Performance over TCP/IP Nets," International Journal of Network Management, pp. 356-367 1998.).

Regarding **claims 2 and 13**, Hidetaka teaches claims 1 and 12, respectively.

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Hidetaka does not teach the method or device characterized in that it consists of defining three quality modes, including a low quality mode, a normal quality mode and a high quality mode.

Muller teaches defining three quality modes, including a low quality mode, a normal quality mode and a high quality mode ("high, medium, or low compression for JPEG files", Muller Page 359: "Image Compression" Paragraph 2).

It would have been obvious at the time of invention to one of ordinary skill in the art to provide the method and device of defining qualities of Hidetaka with the three quality modes of Muller because "most graphics programs allow users to specify high, medium, or low compression for JPEG files" (Muller Page 359: "Image Compression" Paragraph 2). Hidetaka's invention is both a graphics program and utilizes a JPEG standard (JPEG2000).

Regarding **claims 5 and 16**, Hidetaka teaches claims 1 and 12, respectively.

Hidetaka does not teach the method or device characterized in that each quality mode corresponds to the decoding of a predetermined quantity of data representing the digital signal.

Muller teaches the relationship between compression ratios and quantity of data ("The higher the compression ratio, the more information that is deleted and, therefore, the more image detail is lost", Muller Page 359: "Image Compression" Paragraph 3).

It would have been obvious at the time of invention to one of ordinary skill in the art to utilize the link between data size and image quality as put forth by Muller in the

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invention of Hidetaka because "In transmitting or accumulating data of characters, sounds, music, and images, data must be as minimum as possible in terms of the equipment and charge" (Hidetaka Paragraph 3).

5. **Claims 3, 9, 10, 14, 20, and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidetaka (EP 1,069,764 A2) in combination with Keeney et al. (US 2002/0141650 A1).

Regarding **claims 3 and 14**, Hidetaka teaches claims 1 and 12, respectively.

Hidetaka does not teach the method characterized in that a predetermined number of quality layers is associated with each quality mode.

Keeney teaches an image transmission system with quality modes consisting of differing quality layers ("the image 10 can be encoded as several layers", Keeney Paragraph 73).

It would have been obvious at the time of invention to one of ordinary skill in the art to define differing quality modes as different numbers of quality layers such as proposed by Keeney in the method of Hidetaka to give "higher compression ratios without adversely affecting a viewer's perception of the overall quality of the image" (Keeney Paragraph 17), which is the same field of endeavor as Hidetaka and a feature of the JPEG2000 image format.

Regarding **claims 9 and 20**, Hidetaka in combination with Keeney teach the method of claims 3 and 14, respectively, characterized in that the rate information is

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represented in the form of a graph illustrating the size of the image represented by said digital signal as a function of the number of quality layers (Hidetaka Figure 3A and 3B show a graph illustrating image data size as related to differing layers (SD, SDx2, HD) of quality).

Regarding **claims 10 and 21**, Hidetaka in combination with Keeney teach the method of claims 3 and 14, respectively, characterized in that said predetermined number of quality layers is represented in the form of a cursor simultaneously with the visualization of the decoded digital signal (Hidetaka Figure 5 shows the decoded image signal along side a graphical representation of quality level).

6. **Claims 4 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidetaka (EP 1,069,764 A2) in combination with Keeney et al. (US 2002/0141650 A1) in further view of Keeney et al. (US 2002/0141650 A1).

Regarding **claims 4 and 15**, Hidetaka in combination with Keeney teach claims 3 and 14, respectively.

Hidetaka in combination with Keeney does not teach the method characterized in that said decoding parameter is said number of quality layers.

Keeney teaches an image comprising multiple layers ("the image 10 can be encoded as several layers", Keeney Paragraph 73), said layers pertaining to the quality of the image ("The base layer would contain the lowest level of detail. The additional

enhancement layer(s) would contain difference information from the base layer to further refine it", Keeney Paragraph 73) to achieve high compression ratios.

It would have been obvious at the time of invention to one of ordinary skill in the art to use the quality layers of Keeney as the decoding parameter because the decoding parameter has already been established as a "compression parameter" (Hidetaka Paragraph 49) and Keeney seeks "higher compression ratios" (Keeney Paragraph 17) via the disclosed quality-layering scheme.

7. **Claims 8 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidetaka (EP 1,069,764 A2) in combination with Keeney et al. (US 2002/0141650 A1) in further view of Keeney et al. (US 2002/0141650 A1).

Regarding **claims 8 and 19**, Hidetaka and Keeney teach claims 3 and 14, respectively.

Hidetaka and Keeney do not teach the method characterized in that it comprises an initializing step consisting of determining default values of the number of quality layers to be associated with each quality mode, corresponding to mutually different quantities of data representing the digital signal.

Keeney teaches an initializing step consisting of determining default values of the number of quality layers to be associated with each quality mode, corresponding to mutually different quantities of data representing the digital signal ("each area of interest is encoded with a corresponding quality level (Q-factor)", Keeney Paragraph 43; wherein "the image 10 can be encoded as several layers", Keeney Paragraph 73).

It would have been obvious at the time of invention to one of ordinary skill in the art to use the quality modes of Keeney in the invention of Hidetaka and Keeney to achieve "higher compression ratios" (Keeney Paragraph 17) because "In transmitting or accumulating data of characters, sounds, music, and images, data must be as minimum as possible" (Hidetaka Paragraph 3).

8. **Claims 6, 11, 17, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidetaka (EP 1,069,764 A2) in combination with Christopoulos ("The JPEG2000 Still Image Coding System: An Overview," IEEE Transactions on Consumer Electronics, Vol. 46. No.4, pp. 1103-1127 2000).

Regarding **claims 6 and 17**, Hidetaka teaches claims 1 and 12, respectively.

Hidetaka does not teach a method characterized in that it comprises a step consisting of storing said decoding parameters in a file to be transmitted to a final user to deduce therefrom, according to the quality mode chosen by the user, the corresponding decoding parameter.

Christopoulos teaches the method characterized in that it comprises a step consisting of storing said decoding parameters in a file to be transmitted to a final user to deduce therefrom, according to the quality mode chosen by the user, the corresponding decoding parameter ("The codestream has a main header at the beginning that describes the original image and the various decomposition and coding styles that are used to locate, extract, decode and reconstruct the image with the

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desired resolution, fidelity, region of interest and other characteristics", Christopoulos Page 1106; wherein the header can be considered a separate file).

It would have been obvious at the time of invention to one of ordinary skill in the art to transmit the decoding parameters to the user so that the user can "decode and reconstruct the image with the desired resolution, fidelity, region of interest and other characteristics" (Christopoulos Page 1106).

Regarding **claims 11 and 22**, Hidetaka teaches claims 1 and 12, respectively.

Hidetaka does not teach the method or device characterized in that the digital signal is a signal representing an image encoded according to the JPEG2000 standard.

Christopoulos teaches the JPEG2000 standard.

It would have been obvious at the time of invention to one of ordinary skill in the art to use the JPEG2000 standard as taught by Christopoulos in the invention of Hidetaka because it offers "superior low bit-rate performance", "progressive transmission by pixel accuracy and resolution", "random codestream access and processing", "robustness to bit-errors", and "open architecture" (Christopoulos Section II), to name a new advantages over previous standards. Specifically, JPEG2000 has better progressive transmission and explicit support for multiple quality layers.

9. **Claims 7 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidetaka (EP 1,069,764 A2) in combination with Christopoulos ("The JPEG2000

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Still Image Coding System: An Overview," IEEE Transactions on Consumer Electronics, Vol. 46. No.4, pp. 1103-1127 2000) in further view of Nayyar (US 2002/0012471 A1).

Regarding **claims 7 and 18**, Hidetaka and Christopoulos teach claims 6 and 17, respectively.

Hidetaka and Christopoulos do not teach the method characterized in that the file is in SWF format.

Nayyar teaches image decoding data in the SWF file format ("Additional parameters which define the image data may also be written to the SWF file", Nayyar Paragraph 45).

It would have been obvious at the time of invention to one of ordinary skill in the art to put image decoding data in the SWF file format because the SWF format has a large installed base and can contain arbitrary data.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared W. Radkiewicz whose telephone number is (571) 270-1577. The examiner can normally be reached on 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JWR



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